IN THE ABSTRACT:

For the purpose of conducting optimal eddy current correction within a limited output range, a corrective value for eddy current correction for a gradient magnetic field is calculated ~~(501——505)~~, if the calculated value does not exceed a predetermined upper limit value, correction is conducted on the gradient magnetic field using the calculated value ~~(507, 521, 525)~~, and if the calculated value exceeds the predetermined upper limit value, a plurality of gradient magnetic fields affected by eddy current are simulated using a plurality of candidate corrective values not greater than the upper limit value ~~(507——517)~~, and correction is conducted on the gradient magnetic field using a candidate corrective value by which a relatively optimal gradient magnetic field can be obtained ~~(519——525)~~.